

### **REMARKS**

Applicant has carefully reviewed and considered the Office Action mailed on December 31, 2002, and the references cited therewith.

Claims 1, 6, 11, 16, 21-25, and 51-53 are amended; as a result, claims 1-25, and 51-53 are now pending in this application.

#### **§102 Rejection of the Claims**

**Claims 1, 3-6, 8, 9, 11, 13-16, and 18 were rejected under 35 USC § 102(e) as being anticipated by Kunitomo et al. (U.S. Patent No. 6,235,572).**

Claim 6 is amended for clarity. As amended, claim 6 recites, among other elements, a single conductive layer having "a compound formed from a first substance and a second substance" and *also* having "a trace amount of the first substance".

After further examining the Kunitomo et al. reference especially the col. 20 lines 63-67 and col. 21 lines 1-15 as indicated in the Office Action, Applicant respectfully points out that Kunitomo et al. do not disclose all of the elements of the present invention as claimed in claim 6.

Kunitomo et al. disclose, in FIG. 19, a layer 51 made of ruthenium, which is a single substance. FIG. 20 to FIG. 26 of Kunitomo et al. show an electrode 54 formed by etching layer 51. Since layer 51 is made of ruthenium, electrode 54 is also made of ruthenium. However, col. 20 lines 63-67 and col. 21 line 1 of Kunitomo et al. disclose that electrode 54 can be made of ruthenium oxide *if* the ruthenium is oxidized during an oxidation process when forming other layers such as insulating films 56 and 58. Thus, electrode 54 can be made of either ruthenium (a single substance) or ruthenium oxide (a compound having a first substance and a second substance) but not both. In contrast, claim 6 of the present invention recites a conductive layer (electrode) having both a compound formed from a first substance and a second substance *and also* a trace of the first substance.

The differences presented above demonstrate that Kunitomo et al. do not disclose all of the elements of claim 6. Thus, claim 6 is not anticipated by Kunitomo et al. Therefore, Applicant requests that the rejection of claim 6 be reconsidered and withdrawn.

Independent claims 1, 11, and 16 are amended. As amended, claims 1, 11, and 16 recite elements similar to the elements of claim 6. Thus, these claims are also not anticipated by Kunitomo et al. for reasons similar to the reasons presented above regarding claim 6. Therefore, Applicant requests that the rejection of claims 1, 11, and 16 and their dependent claims be reconsidered and withdrawn.

**Claims 16, 17, 19, and 20 were rejected under 35 USC § 102(e) as being anticipated by Lin et al. (U.S. Patent No. 6,249,040).**

Claim 16 recites, among other elements, a single conductive layer. As amended, claim 1 recites that the single conductive layer includes a "compound" and a "substance".

Lin et al. disclose a conductive layer including platinum, which is only a substance. Thus, Lin et al. do not disclose a single conductive layer includes a "compound" and a "substance" as claimed in claim 16. Therefore, claim 16 is not anticipated by Lin et al. Accordingly, Applicant requests that the rejection of claim 16 and its dependent claims be reconsidered and withdrawn.

### **§103 Rejection of the Claims**

**Claims 16-21 and 23-25 were rejected under 35 USC § 103(a) as being unpatentable over Lin et al. in view of Summerfelt et al. (U.S. Patent No. 5,622,893).**

Claim 16, as amended, recites that the single conductive layer includes a "compound" and a "substance".

As presented in the 102 section, Lin et al. disclose a conductive layer including platinum, which is only a substance. Thus, Lin et al. do not disclose a single conductive layer includes a "compound" and a "substance" as claimed in claim 16. The combination of Lin et al. and Summerfelt et al. et al. also does not disclose all of the elements of claim 16. Thus, the rejection of claim 16 over Lin et al. and Summerfelt et al. fails. Accordingly, Applicant requests that the rejection of claim 16 and its dependent claims be reconsidered and withdrawn.

Claims 21 and 23-25 are amended. Claims 21, as amended, recite elements similar to the elements of claim 16. Thus, these claims are also patentable over Lin et al. in view of Summerfelt et al. for reasons similar to the reasons presented above regarding claim 16. Therefore, Applicant requests that the rejection of claims 21 and 23-25 be reconsidered and withdrawn.

**Claims 2, 10, and 12 were rejected under 35 USC § 103(a) as being unpatentable over Kunitomo et al. in view of Yeom et al. (U.S. Patent No. 6,066,540).**

Claims 2, 10, and 12 recite elements of independent claims 1, 6, and 11, respectively. Since Kunitomo et al. do not disclose all of the elements of the independent claims 1, 6, and 11 as present above in the 102 section, Kunitomo et al. also do not disclose all of the elements of claims 2, 10, and 12. The combination of Kunitomo et al. and Yeom et al. also does not disclose all of the elements recited in claims 2, 10, and 12. Thus, the rejection of claims 2, 10, and 12 over Kunitomo et al. and Yeom et al. fails. Accordingly, Applicant requests that the rejection of claims 2, 10, and 12 over Kunitomo et al. and Yeom be reconsidered and withdrawn.

**Claims 5, 7, and 13 were rejected under 35 USC § 103(a) as being unpatentable over Kunitomo et al. in view of Choi (U.S. Patent No. 5,702,970).**

Claims 5, 7, and 13 recites elements of independent claims 1, 6, and 11, respectively. Since Kunitomo et al. do not disclose all of the elements of the independent claims 1, 6, and 11 as present above in the 102 section, Kunitomo et al. also do not disclose all of the elements of claims 5, 7, and 13. The combination of Kunitomo et al. and Choi also does not disclose all of the elements recited in claims 5, 7, and 13. Thus, the rejection of claims 5, 7, and 13 over Kunitomo et al. and Choi fails. Accordingly, Applicant requests that the rejection of claims 5, 7, and 13 over Kunitomo et al. and Choi be reconsidered and withdrawn.

**Claim 22 was rejected under 35 USC § 103(a) as being unpatentable over Kunitomo et al. in view of Yeom et al. and further in view of Choi.**

Claim 22 is amended for clarity. Claim 22 recites elements similar to the elements of claim 6. For example, claim 22 recites a second single electrode having "a compound that includes a first substance and a second substance" and *also* having "a trace amount of the first substance".

As discussed in the 102 section regarding claim 6, Kunitomo et al. do not disclose an electrode having "a compound that includes a first substance and a second substance" and *also* having "a trace amount of the first substance". None of the combinations of Kunitomo et al., Yeom et al., and Choi discloses an electrode having "a compound that includes a first substance and a second substance" and *also* having "a trace amount of the first substance" as recited in

claim 22. Thus, the rejection of claim 22 over Kunitomo et al., Yeom et al., and Choi fails.

Accordingly, Applicant requests that the rejection of claim 22 be reconsidered and withdrawn.

**Claim 51 was rejected under 35 USC § 103(a) as being unpatentable over Kunitomo et al. in view of Kotectki et al. (U.S. Patent No. 6,262,450).**

Claim 51 is amended. As amended, claim 51 recites elements similar to the elements of claim 6. For example, claim 51 recites a single conductive layer having "a compound that includes a first substance and a second substance" and *also* having "a trace amount of the first substance".

As discussed in the 102 section regarding claim 6, Kunitomo et al. do not disclose a single conductive layer having "a compound that includes a first substance and a second substance" and *also* having "a trace amount of the first substance". The combination of Kunitomo et al. and Kotectki et al. also does not disclose a single conductive layer having "a compound that includes a first substance and a second substance" and *also* having "a trace amount of the first substance". Thus, the rejection of claim 51 over Kunitomo et al. and Kotectki et al. fails. Accordingly, Applicant requests that the rejection of claim 51 be reconsidered and withdrawn.

**Claims 52 and 53 were rejected under 35 USC § 103(a) as being unpatentable over Cloud et al. (U.S. Patent No. 5,815,427) in view of Kunitomo et al.**

Claims 52 and 53 are amended. As amended, claims 52 and 53 recite elements similar to the elements of claim 6. For example, claims 52 and 53 recite a single conductive layer having "a compound that includes a first substance and a second substance" and *also* having "a trace amount of the first substance".

Cloud does not disclose a single conductive layer having "a compound that includes a first substance and a second substance" and *also* having "a trace amount of the first substance". As discussed in the 102 section regarding claim 6, Kunitomo et al. do not disclose a single conductive layer having "a compound that includes a first substance and a second substance" and *also* having "a trace amount of the first substance". Since neither Cloud nor Kunitomo et al. discloses a single conductive layer having "a compound that includes a first substance and a second substance" and *also* having "a trace amount of the first substance", the rejection of claims 52 and 53 over Cloud and Kunitomo et al. fails. Accordingly, Applicant requests that the rejection of claims 52 and 53 be reconsidered and withdrawn.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's representative at (612) 373-6969 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

CEM BASCERI ET AL.

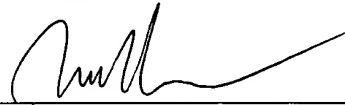
By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402  
612-373-6969

Date

3-31-03

By



Viet V. Tong

Reg. No. 45,416

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 31 day of March, 2003.

Tina Kohout

Name



Signature